

CLAIMS LISTING

1. (currently amended) A method of manufacturing a solid electrolytic capacitor, said method comprising the steps of:

forming a solid electrolytic capacitor element;

applying a pre-coat resin to a portion of capacitor terminals;

connecting the capacitor terminals to the capacitor element; and

encapsulating the capacitor element and a portion of the capacitor terminals with a protective resin;

wherein said pre-coat resin is substantially rigid at ambient temperatures and flexible at ~~high~~ temperatures above ambient temperatures.

2. (original) A method of manufacturing a solid electrolytic capacitor according to claim 1 further comprising the step of selecting the pre-coat resin from thermally curable liquid epoxy resins containing lactone.

3. (previously presented) A method of manufacturing a solid electrolytic capacitor according to claim 1, wherein said pre-

coat resin applying step is performed using a wiper to apply the pre-coat resin onto the portion of the capacitor terminals.

4.(previously presented) A method of manufacturing a solid electrolytic capacitor according to claim 1, wherein said pre-coat resin applying step is performed using a brush to apply the pre-coat resin onto the portion of the capacitor terminals.

5.(previously presented) A method of manufacturing a solid electrolytic capacitor according to claim 1, wherein said pre-coat resin applying step is performed using a counter-rotating wheel assembly to apply the pre-coat resin onto the portion of the capacitor terminals.

6.(previously presented) A method of manufacturing a solid electrolytic capacitor according to claim 1, wherein said pre-coat resin applying step is performed by spraying the pre-coat resin onto the portion of the capacitor terminals.

7.(new) A method of protecting surface mount capacitors from moisture and oxygen corrosion, the capacitor having at least one capacitor element and terminals connected to the capacitor element, said method comprising the steps of:

applying a thermally curable lactone resin to a portion of the terminals of the capacitor; and

encapsulating the capacitor element with a protective resin;

wherein the lactone resin is substantially rigid at ambient temperatures and flexible at elevated temperatures.

8.(new) A method of protecting surface mount capacitors according to claim 7 further comprising the step of selecting the lactone resin from thermally curable lactone-containing epoxy resins.

9.(new) A solid electrolytic capacitor comprising:

a solid electrolytic capacitor element connected to surface mount terminals;

a lactone resin applied to at least a portion of said terminals; and

a protective resin encapsulating said capacitor element and applied to a portion of said terminals over said lactone resin;

wherein said lactone resin is substantially rigid at ambient temperatures and flexible at elevated temperatures.

10.(new) A solid electrolytic capacitor according to claim 9, wherein said lactone resin comprises a lactone and a thermally curable epoxy resin.

11.(new) A solid electrolytic capacitor according to claim 10, wherein said lactone is butyrolactone.

12.(new) A method of manufacturing a solid electrolytic capacitor, said method comprising the steps of:

forming a solid electrolytic capacitor element;

applying a lactone resin to a portion of capacitor terminals;

connecting the capacitor terminals to the capacitor element; and

encapsulating the capacitor element and a portion of the capacitor terminals with a protective resin;

wherein said lactone resin is substantially rigid at ambient temperatures and flexible at elevated temperatures.

13.(new) A method of manufacturing a solid electrolytic capacitor according to claim 12 further comprising the step of selecting the lactone resin from thermally curable liquid epoxy resins containing lactone.